

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 7,722,604 B2
APPLICATION NO. : 10/551277
DATED : May 25, 2010
INVENTOR(S) : Charles E. Brown, III et al.

Page 1 of 2

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

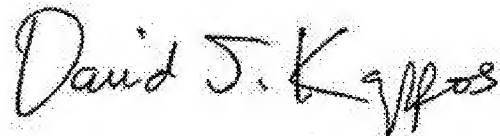
Delete Title Page, enter new Title Page. (Attached)

At column 34, lines 35-37, claim 12 should be deleted.

Renumber claims as follows:

13 to 12, 14 to 13, 15 to 14, 16 to 15, 17 to 16, 18 to 17, 19 to 18, 20 to 19, 21 to 20, 22 to 21, 23 to 22, 24 to 23, and 25 to 24.

Signed and Sealed this
Tenth Day of May, 2011

A handwritten signature in black ink that reads "David J. Kappos". The signature is written in a cursive, flowing style with a large initial "D".

David J. Kappos
Director of the United States Patent and Trademark Office

(12) **United States Patent**
Brown, III et al.

(10) **Patent No.:** **US 7,722,604 B2**
(45) **Date of Patent:** **May 25, 2010**

(54) **BRAIDED MESH CATHETER**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 827 days.

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§ 371 (c)(1),
(2), (4) Date: **Sep. 1, 2006**

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(51) **Int. Cl.**
A61B 18/18 (2006.01)

(52) **U.S. Cl.** **606/41; 600/374**

(58) **Field of Classification Search** **606/27, 606/28, 41, 45-50; 607/101, 102, 116, 122; 600/374**

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,996,938 A 12/1976 Clark, III

(Continued)

FOREIGN PATENT DOCUMENTS

EP 0 771 547 A2 7/1997

(Continued)

OTHER PUBLICATIONS

Partial International Search Report from PCT application PCT/US01/13840.

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(57) **ABSTRACT**

Embodiments of the invention relate to electrophysiology catheters and methods of using the same. According to one embodiment, the catheter includes a braided conductive member at its distal end that can be radially expanded, for example using a mandrel slidably disposed within a shaft of the catheter. According to another embodiment, the catheter comprises a tip portion constructed of an elastomeric material. According to a further embodiment, the catheter includes a braided conductive member wherein a thermocouple is formed using one filament of the braided conductive member and one thermocouple wire. Other embodiments of the invention relate to a handle for use with a catheter and methods of using the same. According to one embodiment, the handle comprises a thumbwheel coupled to a housing, a spring disposed within the housing in contact with the thumbwheel, and means for increasing compression of the spring to increase rotational friction on the thumbwheel.

24Claims, 42 Drawing Sheets

